

BIBLIOGRAPHICAL NOTICE.

A Classed and Annotated Bibliography of the Palæozoic Crustacea, 1698-1892, to which is added a Catalogue of North-American Species. By ANTHONY W. VOGDES. 8vo. 412 pages. San Francisco, California Academy of Sciences, June 1893.

IN the 'Annals and Magazine of Natural History' for April 1890 a short notice was given of a "Catalogue of the North-American non-Trilobitic Palæozoic Crustacea" prepared by the same Author (Captain A. W. Vogdes, of the U.S. Artillery), who has now supplied Palæontologists with the elaborate and careful Bibliography before us, to which the Trilobites of North America are added in a full and lucid catalogue, as well as an augmented list of the other palæozoic Crustacea of that region.

A preparatory edition appeared in the 'Bulletin of the United-States Geological Survey,' No. 63, 8vo. Washington, 177 pages.

The later and far more complete work has been brought out as No. iv. of the "Occasional Papers of the California Academy of Sciences," and is a highly creditable result of the Author's painstaking enthusiasm, and of the Academy's well-directed liberality.

Part I., the "Bibliography" itself, occupies pages 3-252, giving the Authors' names alphabetically, with the titles of the papers, place of their publication, &c., and a full list of the species therein treated of. This is very satisfactory, though misprints occur here, and there are some *errata* besides those mentioned at page 413. There is an appendix to the Bibliography at pp. 409-411. Useful notes are given in many cases as to the memoirs or some portions of their contents.

In Part II. we have a good "Catalogue of North-American species of Trilobites" (pages 259-360), preceded by "A Systematic Classification of the Genera" (pp. 253-258), with the names of Authors, formations, and types, reference to publications, and dates. The names of genera, with synonyms, sections, and subgenera, are carefully distinguished in the printing; and the references, geological stages, and localities appear to have been very carefully attended to. The genera are arranged alphabetically.

In Part III. a "Catalogue of North-American non-Trilobites" occupies pages 369-408; and a classification of the "Merostomata, Phyllocarida, Bivalved Entomostraca, Isopoda, Cirripedæ, Decapoda, Schizopoda, Amphipoda, Stromapoda," precedes it, at pp. 361-369. These are all of Palæozoic age, and their grouping is to some extent provisional. The non-Trilobitic Crustacea found fossil in North America are enumerated on the same plan, and with equal care and precision, as the Trilobites referred to above.

Altogether this bibliographic work on the Palæozoic Crustacea is to be welcomed by Geologists both at home and abroad. The scrupulous care of the Author has raised it far above the level of some catalogues of fossils; and his conscientious and modest nature leads him to recognize the probable requirement of cautious corrections and additions, which he has asked his readers and fellow-workers to supply him with as far as they can. In the meantime we thank him for this excellent Bibliography, and the California Academy for issuing it to the world.